

Chronic Disease Indicators: Indicator Definition



Arthritis among adults aged ≥ 18 years who are obese

Category:	Arthritis
Demographic Group:	Resident persons aged ≥ 18 years.
Numerator:	Respondents aged ≥ 18 years who report doctor-diagnosed arthritis and who are obese (body mass index ≥ 30.0 kg/m ² calculated from self-reported weight and height).
Denominator:	Respondents aged ≥ 18 years who are obese (body mass index ≥ 30.0 kg/m ² calculated from self-reported weight and height). (excluding unknowns and refusals).
Measures of Frequency:	Annual prevalence with 95% confidence interval.
Time Period of Case Definition:	Current.
Background:	There are about 46 million adults with doctor-diagnosed arthritis and 18.9 million have arthritis-attributable activity limitation*. In 2003 arthritis cost an estimated \$128 billion (direct medical and indirect costs)**.
Significance :	Monitoring the prevalence of arthritis among adults who are obese is important because obesity can worsen arthritis-related joint pain. Reaching and maintaining a normal weight can lower a person's risk for developing osteoarthritis, the most common type of arthritis representing about 2/3 of arthritis cases.
Limitations of Indicator:	Doctor-diagnosed arthritis is self-reported in BRFSS and was not confirmed by a health-care provider or objective monitoring; however, such self-reports have been shown to be acceptable for surveillance purposes***. Height and weight are self-reported. Respondents tend to overestimate their height and underestimate their weight, leading to underestimation of BMI and of the prevalence of obesity. Comparisons of tabular data between states should be made with caution because the prevalence estimates are not adjusted for population characteristics (e.g., age) that might explain state-to-state differences. Unadjusted data are presented in this report to provide actual estimates to help in state-level program planning.
Data Resources:	Behavioral Risk Factor Surveillance System (BRFSS). http://www.cdc.gov/arthritis/data_statistics/index.htm
Limitations of Data Resources:	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage (e.g., lower telephone coverage among populations of low socioeconomic status, exclusion of people without land lines, persons in the military, or those residing in institutions), nonresponse (e.g., refusal to participate in the survey or to answer specific questions), or measurement (e.g., social desirability or recall bias).
Healthy People 2010 Objectives:	No objective.

* Hootman JM, Helmick CG. Projections of US prevalence of arthritis and associated activity limitations. *Arthritis Rheum* 2006;54:226–9.

** Yelin E, Cisternas M, Foreman A, Pasta D, Murphy L, Helmick C. National and state medical expenditures and lost earnings attributable to arthritis and other rheumatic conditions—United States, 2003. *MMWR* 2007;56(1):4–7.

*** Sacks JJ, Harrold LR, Helmick CG, Gurwitz JH, Emani S, Yood RA. Validation of a surveillance case definition for arthritis. *J Rheumatol* 2005;32:340–7